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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/525,946	02/28/2005	Kazunori Takahashi	XA-10281	2547
181 7590 02/26/2007 MILES & STOCKBRIDGE PC 1751 PINNACLE DRIVE SUITE 500 MCLEAN, VA 22102-3833			EXAMINER BINDA, GREGORY JOHN	
			ART UNIT	PAPER NUMBER
			3679	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/26/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/525,946

Applicant(s)

TAKAHASHI ET AL.

Examiner

Greg Binda

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 03 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 February 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/28/05; 8/3/06</u> | 6) <input type="checkbox"/> Other: _____ |

Drawings

1. Figures 3B & 7A-7C should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).
2. The drawings are objected to because:
 - a. Reference numerals 4, 5, 7 & 8 are used to identify features in Fig. 2 and then reused to identify modifications of said features in Figs. 3-7. Such usage is proscribed. See MPEP § 608.02(e).
 - b. The portion recited in line 3 of both claims 3 & 4 is not identified by a reference numeral in the drawings.
3. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will

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be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. The disclosure is objected to because at page 9, line 8, "joint 11" should be changed to "joint 10".

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Boersma, US 5,201,545. Fig. 3b show a coupling structure of torque transmitting members for a steering shaft (see Fig. 1) for coupling a pair of torque transmitting members 5 & 6 interposed in a steering shaft, characterized in that:

one 6 of the torque transmitting members and the other 5 of the torque transmitting members are adapted to transmit a steering torque through a pin 7;

the one 6 of the torque transmitting members has an insertion pin hole formed with a large diameter hole portion 8, 9, a stepped portion and a small diameter hole portion 11; and

the pin 7 has a large diameter portion (see "outer diameter" col. 4, line 3), a stepped portion and a small diameter portion which are respectively engaged with the large diameter hole portion, the stepped receiving portion and the small diameter hole portion of the pin insertion hole. Boersma discloses in col. 4, lines 3-6 that the large diameter portion of the pin 7 is press fitted in the large diameter hole portion 8, 9 of the pin insertion hole. Fig. 3b shows the pin 7 has a portion projected from the pin insertion hole and with which the pin is fixed to the one 6 of the torque transmitting members by clinching means (see also "calking" in col. 4, line 16).

7. Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Pearce, US 2,067,284. Fig. 3 show a coupling structure of torque transmitting members for a steering shaft for coupling a pair of torque transmitting members 77, 84 & 75, 76 interposed in a steering shaft, characterized in that:

one 77, 84 of the torque transmitting members and the other 75, 76 of the torque transmitting members are adapted to transmit a steering torque through a pin 78;

the one 77, 84 of the torque transmitting members has an insertion pin hole in the flange 84 formed with a large diameter hole portion, a stepped portion and a small diameter hole portion; and

the pin 78 has a large diameter portion, a stepped portion and a small diameter portion which are respectively engaged with the large diameter hole portion, the stepped receiving portion and the small diameter hole portion of the pin insertion hole. Pearce discloses (see "frictional connection" at page 3, col. 2, line 2) that the large diameter portion of the pin 78 is press fitted in the large diameter hole portion of the pin insertion hole. Fig. 3 shows the pin 78

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has a portion projected from the pin insertion hole and with which the pin is fixed to the one of the torque transmitting members by clinching means.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kaye, Franceschetti, LaFramboise and Aoki each disclose a coupling structure of a steering shaft.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Binda whose telephone number is (571) 272-7077. The examiner can normally be reached on M-F 9:30 am to 7:00 pm with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



GREGORY J. BINDA
PRIMARY EXAMINER